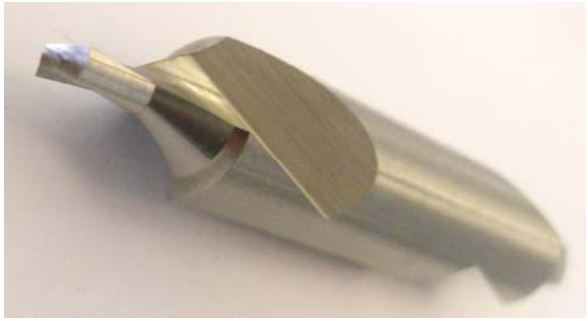
Application Data Sheet

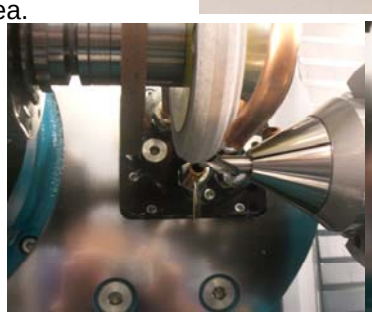
SCHNEEBERGER

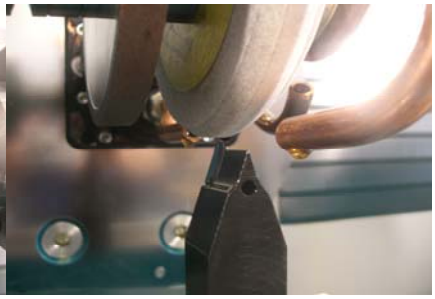
Center Drill Ø10Ø4 Z2 doublesided

A06-330



The fllute of the center drill is ground with a form wheel, which can be conventional or made of CBN. If conventional, it can be easily dressed on the integrated dressing unit on a diamond roll. For high speed grinding a CBN wheel is recommended. The relief of the step is ground with a formed conventional wheel. Pregrinding if necessary is done with CBN-wheel. Dressing cycles will increase the cycletime, Lasermarking happens at masked time inside the loaderarea. No probing, if pushed to mechanical limit inside the clamp.





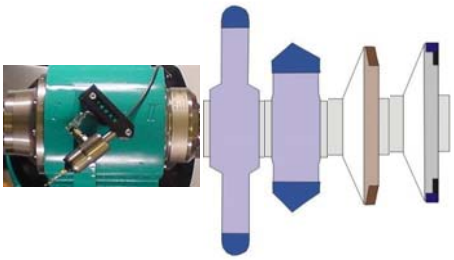
1. Cycletime for Production

Workpiece: Diameter 10 mm, Z 2, Length of cutting edge 15 mm, Helix angle 17º Material HSS										
Operations	Flute 1	End 1	Step pregr.	Step fin.	return	Flute 1	End 1	Step pregr.	Step fin.	Load
Feed [mm/Min]	300	400	400	600	2000	300	400	400	600	9000
Power [kW]	3	1	1	1	4	3	1	1	1	1
Cutting feed [m/s]	45	36	36	36	32	45	36	36	36	
Used wheels	1	2	3	4		4	4	4	4	
Grinding time [s]	30	10	32	23	5	30	10	32	23	9
Total cycle time	3 Min 24									

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

2. Used Grinding Wheels

1	DXF Ø150 B126
2	12A2 Ø125 B126
3	12V2 Ø150 B126
4	DXF Ø150 C120



1 4 3 2

3. Machine and Software Requirements

Machines: 5 axes CNC grinders : GEM DMR 26 kW
Control: Fanuc 31i
Accessories: Robot, dress, laser marking
Coolant: Synthetic Oil, pressure 16 bar
Software: Quinto 5

Responsable engineer: OP, 22.11.09

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TECHNOLOGY FOR TOOLING